June 11, 2020

Via Electronic Filing

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, SC 29210

Re: Docket No. 2021-66-A: South Carolina Office of Regulatory Staff's Motion to Solicit Comments from Utilities and Other Interested Stakeholders Regarding Measures to Be Taken to Mitigate Impact of Threats to Safe and Reliable Utility Service;

Vote Solar's Initial Comments

Pursuant to Directive Order No. 2021-163, Vote Solar appreciates the opportunity to comment on the threats to safe and reliable utility service posed by extreme weather conditions and the ability of utilities to ensure that peak customer demands can be met during extreme weather scenarios. While achieving a reliable grid is a highly technical undertaking, catastrophic grid failures affect South Carolinians' lives in immediate and concrete ways. Long-term outages pose not only a disruption to comfort and convenience, but can become a serious, life-threatening situation for vulnerable populations and where it involves extreme heat or extreme cold. Consideration of the vulnerability of the power system to extreme weather—made more frequent and intense by climate change—should orient around principles of public safety and health first and foremost. Reports have stated that hundreds of people in Texas perished as a direct result of the freezing temperatures and breakdown of utility service during Winter Storm Uri. Lack of electricity in Puerto Rico, following Hurricane Maria, contributed to thousands of deaths in the weeks and months following the storm, as the sporadic access to electricity and basic services led to a degradation of sanitation and the public health infrastructure. Importantly, low-income communities were hit hardest by the blackouts—highlighting the need to ensure that our most vulnerable neighbors.[1] While there are technical causes and solutions to extreme weather impacts on the power system, Vote Solar suggests that stakeholders and the Commission should not lose sight of the human imperative of improving resilience and access to essential, life-saving utility service during weather-driven disasters, and ensuring that our most vulnerable neighbors have the protection.

[1] Skibell, A. (2021, February). Texas grid crisis exposes environmental justice rifts. *E&E News.* Retrieved at: https://www.eenews.net/stories/1063725725..

At a June 3, 2021 webinar hosted by the Office of Regulatory Staff ("ORS"), representatives from ORS confirmed that the scope of the Resilience Study that is underway will be limited to extreme ***winter*** weather events and will not consider the impact of or mitigation options to other types of extreme weather events, including hurricanes, flooding, heat waves, and drought. While Governor McMaster's February 19th letter asking ORS to investigate the reliability of the electric system in light of the extreme winter weather event that was experienced in Texas, Vote Solar respectfully suggests that the Commission should not limit itself to consideration of only one type of weather hazard. Vote Solar asks the Commission to direct ORS to broaden the scope of its inquiry to include the impacts of hurricanes, flooding, heat waves, and drought on the electric system and to identify strategies for mitigating grid vulnerability to such hazards. It is true that the lesson to be learned from Texas is that it is essential to plan for outlier events. Ensuring resiliency for South Carolinians means looking broadly at where outlier events can happen, including multiple types of extreme weather events, rather than focusing on the most recent outlier.

It is also critical that South Carolina plans for future risks, rather than past ones. A recent study conducted by climate scientists in North Carolina found that "it is ***very likely*** that extreme precipitation frequency and intensity in North Carolina will increase due to increases in atmospheric water vapor content," and "It is very likely that some current climate design standards for... buildings and other infrastructure will change by the middle of the 21st century."[2] While South Carolina has its own unique climate and geography, South Carolina's future weather patterns could follow similar trends. Insights gained from this proceeding will be most effective (and best able to protect South Carolina families) if they take these trends into account.

Another regulatory lesson of the Texas outage disaster is the need for ongoing oversight and standard evaluation of utility planning decisions. There are multiple regulatory venues where planning decisions are made that impact the resilience of the grid and the ability to withstand future weather hazards. Prudency review in general rate cases, however, is where the rubber hits the road on the Commission's consideration of the adequacy of utility planning to account for future potential extreme weather. The Commission should incorporate considerations of these extreme weather events—made more intense and frequent by climate change—in future rate cases as it evaluates the soundness of planning and siting decisions for grid infrastructure. But being reactive to utility inaction and simply disallowing imprudent investments that fail to provide adequate resilience does not, however, automatically make the grid stronger and more resilient.

[2] Kunkel, K.E., D.R. Easterling, A. Ballinger, S. Bililign, S.M. Champion, D.R. Corbett, K.D. Dello, J. Dissen, G.M. Lackmann, R.A. Luettich, Jr., L.B. Perry, W.A. Robinson, L.E. Stevens, B.C. Stewart, and A.J. Terando, 2020: North Carolina Climate Science Report. North Carolina Institute for Climate Studies. https://ncics.org/nccsr.

Vote Solar suggests that more proactive and intentional steps are required and requests that the Commission initiate a climate adaptation proceeding to establish requirements that utilities demonstrate that they have adequately considered the vulnerability of the electric system to extreme weather hazards—made more frequent by climate change—and have taken reasonable and prudent steps to adopt adaptation measures that help improve grid resilience and reliability to match the world that we will inhabit 10, 20, and 50 years from today. The forthcoming "Climate Risk and Resilience" stakeholder group that Duke Energy Companies are conducting as part of the ISOP stakeholder process is a promising first step in this direction. Vote Solar encourages the Duke Energy Companies to provide the Commission an ex parte briefing on that process once it is underway and has solidified its scope and direction.

Additionally, a conversation about resilience should consider the ability of distributed energy resources (DERs)—particularly customer-sited DERs—to increase the resilience of the grid or to provide individual households resilience. During the brief outages experienced in CAISO in August 2020, thousands of customers with storage systems from Sunrun, Stem, Enel X, and Tesla responded to keep the blackouts from getting worse.[3] In Ford Motor Company's recent rollout of its electric F-150 Lightning, Ford touted the ability of the Lightning to provide up to three days of back-up power to a home. Increasingly, distributed energy resources are able to protect customers and support the grid during times of unprecedented strain. The Commission should empower these resources to play the same role in South Carolina, and ensure that vulnerable populations in South Carolina have access to the same benefits.. The Commission should consider the resilience benefits of DERs in the appropriate proceeding and require utilities to leverage these DERs through innovative customer programs, including programs designed to enable access and participation by low-income customers, to ensure that what happened in Texas never transpires in South Carolina.

Respectfully Submitted,

_____/s/_____
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[3] St. John, J. (2020, August). Distributed Energy Helped Fight California's Grid Outages, But It Could Do Much More. *GreenTechMedia.* Retrieved at: https://www.greentechmedia.com/articles/read/california-outages-distributed-energys-grid-potential-barriers-to-access.